Highlights

♦ **There were 12.5 million people with science or engineering degrees or who were working as scientists or engineers, residing in the United States as of April 1997—10.6 million in the workforce.** Of these 10.6 million individuals working in the United States in 1997, the vast majority (10.1 million) held at least one university degree in a science or engineering field. About 30 percent (3.1 million) of the 10.1 million S&E degree holders in the workforce were also employed in S&E occupations.

♦ **A little more than half of the 4.9 million S&E degree holders working outside S&E in 1997 were employed in either management-administration occupations (29 percent), sales and marketing jobs (16 percent), or non-S&E–related teaching positions (9 percent) in 1997.** Almost 90 percent of those employed as non-S&E teachers said that their work was at least somewhat related to their S&E degree field, compared to 71 percent of managers-administrators and 47 percent of those employed in sales and marketing jobs.

♦ **Women made up slightly more than one-fifth (23 percent) of the S&E workforce, but close to half (46 percent) of the U.S. labor force in 1997.** Although changes in the NSF surveys do not permit analysis of long-term trends in employment, short-term trends show some increase in the representation of women with doctorates in S&E employment: women represented 23 percent of scientists and engineers with doctorates in the United States in 1997. In 1993, they represented 20 percent and in 1995, 22 percent.

♦ **By age 63, 50 percent of S&E bachelor's and master's degree holders were not working full-time.** For S&E Ph.D. holders, this 50 percent mark is not reached until three years later, at age 66. By age 70, only 10 percent of bachelor's and master's degree holders and 20 percent of Ph.D. holders were working full-time.

♦ **With current retirement patterns, the total number of retirements among S&E degreed workers will dramatically increase over the next 10–15 years.** This will be particularly true for Ph.D. holders because of the steepness of their age profile.

♦ **The private for-profit sector is by far the largest employer of S&E workers**. In 1997, 73 percent of scientists and engineers who had bachelor's degrees and 60 percent of those with master's degrees were employed in a private, for-profit company. The academic sector was the largest sector of employment for those with doctorates (49 percent), but only 32 percent of S&E doctorates were in tenure-track positions at four-year institutions. Sectors employing smaller numbers of S&E workers included educational institutions other than four-year colleges and universities, nonprofit organizations, and state or local government agencies.

♦ **In 1993 only 28.5 percent of college graduates employed in computer occupations had computer science degree.** This rose to 45.2 percent of those in computer occupations who were under age 30.

♦ **In 1997 the median annual salary of employed S&E bachelor's degree holders was $52,000; for master's recipients, it was $59,000 and for doctorate holders $62,000.** Engineers commanded the highest salaries at each degree level. The second highest salaries were earned by computer and mathematical scientists at the bachelor's and master's levels, and physical scientists and computer and mathematical scientists at the doctorate level. The lowest median salaries were reported for social scientists at each degree level.

♦ **Aggregate measures of labor market conditions changed only slightly for recent doctoral recipients in S&E, defined here as those one to three years after their degree.** Unemployment fell from 1.9 percent for a similar graduation cohort in 1995 to 1.5 percent in 1997. At the same time, the proportion of recent Ph.D. recipients reporting that they were either working outside their fields because jobs in their fields were not available, or were involuntarily working part-time, rose slightly from 4.3 percent to 4.5 percent.

♦ **With the exception of young fields, such as computer sciences (where 70 percent of degree holders are under age 40), the greatest population density of individuals with S&E degrees occurs between age 40 and 49.** The aging of the S&E workforce has both positive and negative implications for different aspects of research productivity, and presages a rapid increase in the number of S&E workers of all degree levels reaching traditional retirement ages.

♦ **In April 1997, 26.1 percent of holders of doctorates in S&E in the United States were foreign born.** The lowest percentage of foreign-born doctorates was in psychology (7.2 percent), and the highest was in civil engineering (52.0 percent). Almost one-fifth (19.2 percent of those with master's degree in S&E were foreign born. Even at the bachelor's degree level, 9.7 percent of those with S&E degrees were foreign born—with the greatest proportion in chemistry (15.9 percent), computer sciences (15.6 percent), and across all engineering fields (14.9 percent).